Advantages of TPU hot melt film

Detail Introduction :

TPU Hot Melt Film is a new type of adhesive used in various applications. This material is widely used in clothing bags, sports fabrics, automobile interior decoration, reflective materials, seamless underwear, pockets, and waterproof eisure zipper. TPU hot melt film is also used in logo trademark and leather fabric composite. The advantages of TPU hot melt adhesive film are endless. However, a brief description of these applications will be helpful.

Applications of TPU hot melt adhesive film

TPU hot melt adhesive film is one of the most widely used types of hot melt adhesive films, and is second only to EVA. Its material is thermoplastic polyurethane (TPU), which is known for its pliability, cold-resistant properties, and water-resistance. As a result, it is widely used in many applications, including clothing, furniture, and automobiles. In addition to being extremely versatile, TPU hot melt adhesive film is also water-resistant and has excellent tensile and adhesive properties.

Its melting point varies, from a low of 65 degrees to a high of 180 degrees. This material has excellent adhesion to other materials, such as PVC, and is soluble in esters and ketones. TPU film is highly versatile and is an excellent choice for a variety of materials. Listed below are a few examples of its various applications. These include: apparel; footwear; home furnishings; electronics; and more.

TPU hot melt adhesive film is used on a variety of materials, including high-end clothing and outdoor sports apparel. It is waterproof and breathable, and has a high activation temperature. TPU granules are free of inferior fillers. TPU hot melt adhesive film can be punched into precise shapes and sizes, and is suitable for automated applications. In addition to the above, TPU hot melt adhesive film is highly versatile and can be used on a variety of materials.

In addition to high-quality products, hot melt adhesive film has several other advantages. Its fast bonding speed allows for automated production. Its versatility also makes it easy to recycle. One of the most popular hot melt adhesive films is Sichuan Famous Brand. It is a reliable source with competitive price and stable supply.

TPU hot melt adhesive film is an excellent choice for bonding textiles and other flexible materials. These films are commonly used in the textile industry. They are also used to produce seamless sportswear garments and protective layers on polyester bulletproof vests. They are also useful in many other industrial applications. There is virtually no limit to what TPU hot melt adhesive film can be used for. The possibilities are endless. There is truly no limit to what TPU hot melt adhesive film can do for you.

High-quality TPU hot melt adhesive film is characterized by its crystalline nature. These materials have high cohesive strength and transfer more strain to their substrates. The higher molecular weight of the polymer chain provides higher tensile strength and greater heat resistance.

However, these polymers have unsaturated bonds, making them more susceptible to autoxidation and UV degradation. In addition to the advantages of these products, TPU hot melt adhesive film is also compatible with other types of polymers, including paraffin and polyethylene.

Releasing TPU hot melt adhesive film

If you're looking for a TPU hot melt adhesive film, you've come to the right place. Its double-sided adhesive properties make it perfect for a variety of applications, including outdoor sports apparel and high-end apparel. The film's elastic properties also make it an excellent choice for bras, underwear, and more. Other applications include electronics book covers, tablets, and bag and shoe material processing. This thermoplastic polyurethane film is even safe for children.

TPU film is a hot melt adhesive film that can bond several materials and uneven surfaces. This type of film is most commonly used in the lamination of smart cards and chip passports, as well as electronic products. It is also used in the bonding of mobile phone window frames and camera battery slots. TPU hot melt adhesive film is easy to glue, and its various applications have increased its popularity. In addition to being a flexible, durable material, TPU film can be paid for with various methods.

Releasing TPU hot melt adhesive film is a common application for TPU hot melt adhesive film. It is usually welded between 175 and 300 degrees, and is available in different UV and hydrolysis resistance options. The TPU film can be custom-made to fit your project's exact width and length requirements. This film offers near-limitless flexibility when crafting projects. However, be sure to read the manufacturer's manual before applying TPU hot melt adhesive film.

Low-temperature TPU hot melt adhesive film is a thermoplastic double-sided adhesive film composed of polyurethane. Its low melting point (80 degC) is ideal for laminating leather materials. Its low melting point allows it to protect leather materials better from heat damage. This type of TPU hot melt adhesive film is often used in footwear, clothing, and household building materials. It has also passed SGS's RoHS 2.0 test.

High-temperature TPU hot melt adhesive film is another type of high-temperature film. It can be used to bond various materials without the need for release paper. It is solvent-free, non-toxic, and washable. It is soft to the touch. Various types of hot melt adhesive film are available for different types of applications. To choose the best material, consider the specific application needs of your project.

Another type of hot melt adhesive film is known as "hot melt adhesive web." This kind of product has a net-like structure, similar to non-woven fabrics, and has excellent air permeability. It is lightweight and requires no prep prior to use. In addition to its superior performance, hot melt adhesive film is also available in double dot, paste dot, and powder dot forms. You can use this material for air filters, fuel filtration systems, and lamination applications.

Activating TPU hot melt adhesive film

Activating TPU hot melt adhesive film is a polyurethane material with high elasticity, a high activation temperature, and a variety of desirable properties, including high transparency, waterproof, breathable, and good bonding and viscosity. This material is particularly well suited for use in electronics and sports applications because of its unique formula. The temperature of activation is set at approximately 450°C and the film's adhesion is relatively high. Its high melting temperature also helps the film to retain its fluid body shape.

The TPU hot melt adhesive film is welded in the presence of an additional polymer, which is preferably compatible with TPU and does not separate during the melting process. This adhesive material is typically composed of 75% TPU and up to 97% TPU polymers. As a result, it offers virtually limitless craft-ability. It can be fabricated to precise width and length specifications, offering virtually unlimited potential for creating products.

In this study, investigated the bonding performance of a TPU hot melt adhesive film using a patented process that mechanically deforms the TPU pellets. The resulting film contains zinc stearate particles that form a protective film around the adhesive polymer. According to EDX and XPS analysis, the zinc stearate film contains particles that are about 170 mm in size, a value comparable to the received state of the TPU adhesive.

The polymeric polyol component of the Activating TPU hot melt adhesive film is further stabilized by adding low molecular-weight polyols in amounts up to 10 wt.-%. Adding this material to the hot melt adhesive film reduces the diffusibility of the film. In addition to being resistant to temperature variations, this material is also free from organic solvents and plasticizers.

The terminated thermoplastic PU (TPU) contains 0.5 to 10% aliphatic diols, terpenes, and ethylene glycol. Moreover, the OHZ 138 component contains 7.4% of phosphoric acid. Activating TPU hot melt adhesive film comes in two forms: liquid and semi-solid. The former is transparent, while the latter is opaque.

The groups in TPU are formed by adding monoamines or aliphatic polyols to the preparation of the thermoplastic material. Polyols are the most commonly used types for making TPU films, and monoalkohols are the least preferred. Both TPU types are suitable for use in aqueous applications, and the former is recommended for non-critical applications.

A suitable hot melt adhesive composition comprises at least 75% thermoplastic polyurethanes. It may also include up to 20% thermoplastic polymers. In addition, it contains between 0.2% and 5% of adhesion promoters and small amounts of tackifying resin. These compounds are a suitable choice for adhesives in shoe manufacturing applications. This invention also provides a cost-effective, eco-friendly alternative to solvent-based adhesives.